

Amendments to the Claims:

The following amendments and cancellations to the claims are made without prejudice or disclaimer. This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-24 (cancelled)

25. (currently amended) A recombinant antibody, or an antigen binding fragment thereof, which specifically binds to a modified integrin I-domain in the open conformation, ~~relative to a modified integrin I-domain in the closed conformation.~~
26. (currently amended) ~~The An antibody of claim 25,~~ or an antigen binding fragment thereof, which binds to an activation specific epitope on ~~the an integrin I-domain in the open conformation.~~
27. (currently amended) The antibody ~~of claim 25,~~ or an antigen binding fragment thereof, of claim 25, which blocks an interaction between an integrin and a cognate ligand.
28. (cancelled)
29. (currently amended) The antibody ~~of claim 25,~~ or an antigen binding fragment thereof, of claim 25, wherein said antibody is an anti-LFA-1 antibody.

30. (currently amended) A recombinant anti-integrin antibody, or an antigen binding fragment thereof, which specifically binds to an integrin I-domain in the open conformation, ~~relative to an integrin I domain in the closed conformation.~~

Claims 31-72 (cancelled)

73. (currently amended) The antibody ~~of claim 25~~, or an antigen binding fragment thereof, of claim 25, wherein said antibody, or antigen binding fragment thereof, specifically binds to a modified I-domain of an α L subunit.

74. (currently amended) The antibody ~~of claim 73~~, or an antigen binding fragment thereof, of claim 73, wherein said modified I-domain of an α L subunit contains amino acid substitutions K287C/K294C.

75. (currently amended) ~~The An anti-LFA-1 antibody of claim 31, or an antigen binding fragment thereof, wherein the antibody, or an antigen binding fragment thereof specifically binds an LFA-1 integrin in the open conformation to an LFA-1 I domain in the open conformation, relative to an LFA-1 I domain in the closed conformation.~~

76. (currently amended) The antibody ~~of claim 25 or 30~~, or an antigen binding fragment thereof, of claim 25 or 30, wherein said antibody comprises a portion of a human antibody and a portion of a non-human antibody.

77. (currently amended) The antibody ~~of claim 25 or 30~~, or an antigen binding fragment thereof, of claim 25 or 30, wherein said antibody is a humanized antibody.

78. (currently amended) The antibody ~~of claim 25 or 30~~, or an antigen binding fragment thereof, of claim 25 or 30, wherein said antibody is a chimeric antibody.

79. (currently amended) The antibody ~~of claim 73~~, or an antigen binding fragment thereof, of claim 73, wherein said modified I-domain of an α L subunit contains amino acid substitutions E284C/E301C.

80. (currently amended) The antibody or antigen binding fragment thereof, of claim 25, wherein said antibody, or antigen binding fragment thereof, is identified by screening a phage display library with a modified integrin polypeptide, and isolating said antibody, or antigen binding fragment thereof.

81. (cancelled)

82. (cancelled)

83. (previously presented) An antibody, or an antigen binding fragment thereof, which binds to an integrin I-domain in the open conformation but not to an integrin I-domain in the closed conformation.

84. (currently amended) An antibody, or an antigen binding fragment thereof, which binds to an integrin I-domain in the open conformation but not to a modified integrin I-domain that is locked in the closed conformation by the substitutions K289C/K294C.

85. (currently amended) The antibody ~~of claim 83~~, or antigen binding fragment thereof, of claim 83, which binds to a modified integrin I-domain in the open conformation but not to a modified integrin I-domain in the closed conformation.

86. (currently amended) The antibody of ~~claim 85~~ or antigen binding fragment thereof, of claim 85, wherein the modified integrin I-domain in the open conformation is modified by introduction of a disulfide bond.

87. (currently amended) The antibody of ~~claim 86~~ or antigen binding fragment thereof, of claim 86, wherein the modified integrin I-domain in the open conformation comprises substitutions E284C/E301C in an α L subunit.

88. (currently amended) The antibody of ~~claim 86~~ or antigen binding fragment thereof, of claim 86, wherein the modified integrin I-domain in the open conformation comprises a substitutions K287C/K294C in an α L subunit.

89. (withdrawn) A peptide ligand that binds to a modified integrin I-domain in the open conformation.

90-93. (cancelled)

94. (new) The antibody or antigen binding fragment, of claim 30 or 83, wherein the integrin I-domain is an I domain of α 1.

95. (new) The antibody or antigen binding fragment, of claim 30 or 83, wherein the integrin I-domain is an I domain of α 2.

96. (new) The antibody or antigen binding fragment, of claim 30 or 83, wherein the integrin I-domain is an I domain of α 10.

97. (new) The antibody or antigen binding fragment, of claim 30 or 83, wherein the integrin I-domain is an I domain of α 11.

98. (new) The antibody or antigen binding fragment, of claim 30 or 83, wherein the integrin I-domain is an I domain of α D.

99. (new) The antibody or antigen binding fragment, of claim 30 or 83, wherein the integrin I-domain is an I domain of α E.

100. (new) The antibody or antigen binding fragment, of claim 30 or 83, wherein the integrin I-domain is an I domain of α M.

101. (new) The antibody or antigen binding fragment, of claim 30 or 83, wherein the integrin I-domain is an I domain of α X.

102. (new) The antibody or antigen binding fragment, of claim 83, wherein the integrin I-domain is an I domain of α L.

103. (new) The antibody or antigen binding fragment, of claim 26, wherein the integrin I-domain is an I domain of α L.

104. (new) The antibody or antigen binding fragment, of claim 26, wherein the integrin I-domain is an I domain of α M.

105. (new) The antibody or antigen binding fragment, of claim 83 that is a monoclonal antibody.

106. (new) The antibody or antigen binding fragment, of claim 83 that is a recombinant antibody.

107. (new) The antibody or antigen binding fragment, of claim 75 that is a recombinant antibody.

108. (new) The antibody or antigen binding fragment, of claim 103 that is a recombinant antibody.

109. (new) The antibody or antigen binding fragment, of claim 73 that is a recombinant antibody.

110. (new) The antibody or antigen binding fragment, of claim 25, 30, or 83 that blocks interaction between an integrin and a cognate ligand.

111. (new) The antibody or antigen binding fragment, of claim 75 or 103 that blocks interaction between an integrin and a cognate ligand.

112. (new) The antibody or antigen binding fragment, of claim 111, wherein the cognate ligand is ICAM-1.

113. (new) The antibody or antigen binding fragment, of claim 111, wherein the cognate ligand is ICAM-2 or ICAM-3.

114. (new) The antibody or antigen binding fragment, of claim 30, 83, 75, or 103 further comprising a physically linked detectable substance.

115. (new) The antibody or antigen binding fragment, of claim 102, wherein the physically linked detectable substance comprises an enzyme, a fluorescent material, or a radioactive material.

116. (new) The antibody or antigen binding fragment, of claim 102, wherein the physically linked detectable substance comprises a fluorescent or radioactive material.

117. (new) The antibody or antigen binding fragment, of claim 25, further comprising a therapeutic moiety.

118. (new) The antibody or antigen binding fragment, of claim 30, further comprising a therapeutic moiety.

119. (new) The antibody or antigen binding fragment, of claim 75, further comprising a therapeutic moiety.

120. (new) The antibody or antigen binding fragment, of claim 83, further comprising a therapeutic moiety.

121. (new) The antibody or antigen binding fragment, of claim 103, further comprising a therapeutic moiety.

122. (new) The antibody or antigen binding fragment, of any of claims 117-121, wherein the therapeutic moiety comprises a cytotoxin.

123. (new) The antibody or antigen binding fragment, of any of claims 117-121, wherein the therapeutic moiety comprises a radioactive metal ion.

124. (new) The antibody or antigen binding fragment, of any of claims 117-121, wherein the therapeutic moiety comprises a chemical therapeutic agent.

125. (new) The antibody or antigen binding fragment, of any of claims 117-121, wherein the therapeutic moiety comprises a protein possessing a desired biological activity.

126. (new) The antibody or antigen binding fragment, of any of claims 117-121, wherein the therapeutic moiety comprises a toxin.

127. (new) A pharmaceutical composition comprising (i) an antibody or antigen binding fragment thereof according to claim 25, 26, 27, or 29, and (ii) a pharmaceutically acceptable carrier.

128. (new) A pharmaceutical composition comprising (i) an antibody or antigen binding fragment thereof according to claim 30 or 83, and (ii) a pharmaceutically acceptable carrier.

129. (new) A pharmaceutical composition comprising (i) an antibody or antigen binding fragment thereof according to claim 75, and (ii) a pharmaceutically acceptable carrier.

130. (new) A pharmaceutical composition comprising (i) an antibody or antigen binding fragment thereof according to claim 103, and (ii) a pharmaceutically acceptable carrier.